

Amendments to the Specification

Please replace the title as follows:

~~ELECTROMAGNETIC TRANSDUCER LAMINATE, ELECTROMAGNETIC
TRANSDUCER, THIN FILM MAGNETIC HEAD, MAGNETIC HEAD ASSEMBLY,
MAGNETIC REPRODUCING APPARATUS, AND METHOD OF MANUFACTURING
ELECTROMAGNETIC TRANSDUCER LAMINATE WITH DIFFERENT WIDTHS FOR
THE SEMI-HARD MAGNETIC LAYER AND THE FIRST FERROMAGNETIC LAYER~~

Please replace the paragraph beginning on page 17, line 5, with the following rewritten paragraph:

The semi-hard magnetic layer 42 which is a characteristic part of the laminate 31 is provided for applying a magnetic bias uniformly oriented in a longitudinal direction to the first ferromagnetic layer 44 in order to control a magnetic domain of the first ferromagnetic layer 44 through using exchange coupling by a RKKY interaction. The "RKKY interaction" is an indirect exchange interaction using spin polarization of conduction electrons as a medium, and is named from the initials of four people, that is, Ruderman and Kittel who have proposed an exchange interaction between nuclear spins through the medium of conduction electrons, and Kasuya and Yoshida who have extended the issue to rare earths and transition metals. The semi-hard magnetic layer 42 is made of, for example, a semi-hard magnetic material having a moderate coercive force lying halfway between a soft magnetic material and a hard magnetic material, such as nickel (Ni), a nickel-cobalt alloy (NiCo), a nickel-cobalt-iron-chromium-rhodium alloy (NiCoFeCrRh) or the like with a thickness of approximately 5.0 nm. More specifically, for example, the semi-hard magnetic material of the semi-hard magnetic layer 42 preferably has as large a anisotropic magnetic field H_k as the magnetic domain of the first ferromagnetic layer 44 can be controlled, and has a magnetostriction coefficient of $\lambda < 0$ so as to stably fix a magnetization direction 42J of the semi-hard magnetic

layer 42 in a longitudinal direction. A main reason why the semi-hard magnetic layer 42 needs to have a moderately large anisotropic magnetic field H_k is as follows. When the anisotropic magnetic field H_k is too small, the magnetization direction 42J is easily rotated according to the signal magnetic field of the hard disk 101, so the signal magnetic field cannot be sufficiently conducted to the first ferromagnetic layer 44. On the other hand, when the anisotropic magnetic field H_k is too large, exchange coupling becomes stronger than necessary, so it is difficult to rotate the magnetization direction 44J of the first ferromagnetic layer 44. Therefore, either case causes a decline in the reproduction output. For example, the width in a longitudinal direction (left to right direction in Fig. 6) of the semi-hard magnetic layer 42 is equal to or larger than the width in a longitudinal direction of a top portion including the first ferromagnetic layer 44 in the laminate 31, and more specifically, the width of the semi-hard magnetic layer 42 is larger than the width of the top portion including the first ferromagnetic layer 44. Herein, the semi-hard magnetic layer 42 corresponds to an example of "a first magnetic domain control layer" and "a magnetic domain control layer" in the invention. As should be appreciated, the longitudinal direction is a so-called read width direction.

Please replace the paragraph beginning on page 24, line 17, with the following rewritten paragraph:

Moreover, in the embodiment, the width in the longitudinal direction of the semi-hard magnetic layer 42 is equal to or larger than the width in the longitudinal direction of the first ferromagnetic layer 44, so the whole first ferromagnetic layer 44 faces the semi-hard magnetic layer 42, and the magnetic bias is applied from the semi-hard magnetic layer 42 to the whole first ferromagnetic layer 44. Therefore, unlike the case where the width of the semi-hard magnetic layer 42 is smaller than the width of the first ferromagnetic layer 44, and both end neighborhood portions of the first ferromagnetic layer 44 do not face the semi-hard

magnetic layer 42, no portion where the magnetic bias is difficult to be supplied in the first ferromagnetic layer 44 is produced, so the bias distribution of the first ferromagnetic layer 44 can become uniform.